

## **REMARKS**

Applicants respectfully request reconsideration of the present Application. Claims 1, 14-16, 26, and 32 have been amended and claims 27-28 and 43 have been canceled herein. Care has been exercised to introduce no new matter. Claims 1-12, 14-26, 29-32, 34-42, and 44-46 are pending and are in condition for allowance.

### **Rejections based on 35 U.S.C. § 112**

Claim 16 was rejected under 35 U.S.C. § 112 for ostensibly failing to comply with the written description requirement and being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants have amended independent claim 16 to remove the limitation “independent of a promotion or demotion of another listing” as noted by the Office Action. As such, Applicants respectfully submit that amended independent claim 16 complies with the written description requirement and is not indefinite. Accordingly, Applicants request withdrawal of the 35 U.S.C. § 112 rejection of amended independent claim 16 and allowance of the claim.

### **Rejections under 35 U.S.C. § 103(a) over Kamangar in view of McElfresh**

Claims 1-32 and 34-46 were rejected under 35 U.S.C. 103(a) as ostensibly being unpatentable over Kamangar, et al., U.S. Publication No. 2003/0046161 (hereinafter “Kamangar”) in view of McElfresh et al., U.S. Publication No. 2003/0149938 (hereinafter “McElfresh”). Applicants respectfully submit that although claims 1-32 and 34-46 were rejected under 35 U.S.C. § 103(a) over Kamangar in view of McElfresh at p. 4, sec. 9 of the Office Action, only claims 1-15 were provided with specific rejection under these references; the remaining claims 16-32 and 34-46 were rejected under 35 U.S.C. § 103(a) over Kamangar in view of Meisel as indicated below. Accordingly, Applicants assume that the listing of the

rejected claims at p. 4, sec. 9 of the Office Action was a typographical error and only supply remarks with respect to claims 1-15 in regard to this rejection. However, for sake of completeness, Applicants respectfully submit that claims 16-32 and 34-46 are not obvious over Kamangar in view of McElfresh.

Independent Claim 1

Independent claim 1, as currently amended, in part recites a method for optimizing search results listings displayed in a search web page. An actual performance of each listing in a set of listings located in web pages is measured. An expected performance is assigned to each listing in the set of listings based on their respective locations in the web page. An overall average performance for the set of listings is determined. The set of listings is promoted to a more prominent location when the overall average performance indicates that overall the actual performance of the set of listings is better than the tiered expected performance. The set of listings is demoted to a less prominent location when the average overall performance indicates that overall the actual performance of the set of listings is poorer than the tiered expected performance. A listing from the set of listings is displayed at the more prominent location or at the less prominent location.

Independent claim 1 has been amended herein to further recite that an average expected performance for the set of listings is determined. Amended independent claim 1 also recites that the average expected performance is tiered based on the number of listings included in the set.

In contrast, Kamangar describes a method for ordering advertisements based on performance information. *See Title of Kamangar.* Accordingly, a list of candidate ads is obtained and performance parameters for the ads are identified. *Kamangar* at ¶ [0040]. A score

is determined for each of the candidate ads based on the performance parameters. *Id.* at ¶ [0043]. The ads are then ordered with respect to one another based on their score. *Id.* The ads are then selected for display and located in a search results Web page for display based on their score ranking with respect to one another. *Id.* at ¶ [0049].

As such, Applicants respectfully submit that Kamangar does not describe all of the limitations of amended independent claim 1. As indicated by the Office action Kamangar does not describe a *set* of listings that includes a plurality of listings. Thus, Kamangar does not describe determining an average expected performance or an average actual performance for the *set* of listings as recited by amended independent claim 1. Kamangar does describe average click-through rates for individual ads but, no description of an average expected performance or average actual performance for a *set* of ads is described. *See Kamangar* at ¶¶ [0042] – [0043].

Kamangar also fails to describe tiering the average expected performance of the set of listings based on the number of listing in the set as recited by amended independent claim 1. As described by Applicants' Specification, the average expected performance for the set of listings is increased or decreased based on the number of listings in the set to account for the greater or lesser likelihood of the set receiving a click due to for example, the amount of space the listings occupy on the web page. *See Applicants' Specification* at p. 14, lines 1-23. As described above, Kamangar does not describe a set of listings and thus, cannot describe tiering such a set based on the number of listings therein.

Applicants respectfully submit that McElfresh fails to cure the deficiencies of Kamangar. McElfresh fails to describe determining an average expected performance or an average actual performance for the *set* of listings as recited by amended independent claim 1. McElfresh does indicate that a set of ads may be generated for placement on a web page but,

does not describe performing calculations to determine an average expected performance or average actual performance based on the set of ads. *McElfresh* at ¶ [0036]. Additionally, the cited portions of *McElfresh* do not describe tiering a set of listings based on the number of listings therein.

Accordingly, Applicants submit *Kamangar* and *McElfresh*, either alone or in combination, fail to teach or suggest all of the limitations of independent claim 1 as amended. Applicants respectfully submit that amended independent claim 1 is not obvious over *Kamangar* in view of *McElfresh*, and request withdrawal of the rejection under 35 U.S.C. § 103(a). Amended independent claim 1 is believed to be in condition for allowance and such favorable action is hereby respectfully requested.

Claims 2-12 and 14-15 depend, either directly or indirectly, from amended independent claim 1. Thus, Applicants respectfully submit that *Kamangar* and *McElfresh*, either alone or in combination, fail to teach or suggest all of the limitations of dependent claims 2-12 and 14-15 for at least the above-cited reasons. Accordingly, Applicants respectfully submit that dependent claims 2-12 and 14-15 are not obvious over *Kamangar* in view of *McElfresh*, and request withdrawal of the 35 U.S.C. § 103(a) rejection thereof. Claims 2-12 and 14-15 are believed to be in condition for allowance and such favorable action is hereby respectfully requested.

#### **Rejections under 35 U.S.C. § 103 over Kamangar in view of Meisel**

Claims 16-32 and 34-46 were rejected under 35 U.S.C. 103(a) as ostensibly being unpatentable over *Kamangar* in view of *Meisel*, et al., U.S. Publication No. 2003/0033292 (hereinafter “*Meisel*”).

Independent Claim 16

Independent claim 16, as currently amended, recites a search results optimization system. The system includes a performance measurement process, a listing placement process, and a displaying process. The performance measurement process measures an actual performance against an expected performance for a listing. The listing placement process determines that a listing should be promoted or demoted to a more prominent or less prominent location based on the measurement. The displaying process displays the listing in the more or less prominent location.

Independent claim 16 has been amended to more clearly recite that the actual performance of a listing does not include the performance of another listing. Thus, the determination to promote or demote a listing does not consider the performance of other listings.

Kamangar fails to describe all of the limitations of amended independent claim 16. Kamangar, as described previously, describes selecting a final set of ads, determining a score for each of the ads in the final set, and ordering the ads based on their scores. As such, the determination to promote or demote an ad is based on the performance of the other ads in the final set, e.g. the performance of a first ad is compared to the performance of a second ad to determine if the first ad should be promoted above or demoted below the second ad. Additionally, as indicated by the Office Action Kamangar does not disclose an expected performance level that is defined by a user and is adjusted based on whether the listing appears in a more prominent or less prominent location.

Conversely, by amended independent claim 16 the determination to promote or demote a listing does not take into account the performance of other listings. *See, for example, Applicants' Specification at p. 10, lines 10-25.* The determination to promote/demote a listing is

based on the listing's expected performance compared to its actual performance. *Id.* The actual performance may include the context of the listing such as the listing's placement, display features, and its location in proximity to other listings, but does not take into account the performance of any other listings. *Id.* at p. 9, lines 5-9.

Independent claim 16 has also been amended to recite that the expected performance level includes settings that are tunable to accommodate different performance expectations in one or more search engine markets. *See Applicants' Specification* at p. 10, lines 10-26. Kamangar does not describe tuning an expected performance level to accommodate performance expectations of listings with respect to various search engine markets.

The Office Action also cites Meisel in support of Kamangar. Applicants respectfully submit that Meisel fails to cure the deficiencies of Kamangar. Meisel describes a pay-for-placement search result system that is determined by a site promoter. *Meisel* at ¶ [0038]. A site promoter participates in bidding on search terms relevant to the content of the site promoter's website. *Id.* at ¶ [0048]. The relevance of the search term to the site promoter's website is determined and utilized to weight the bids such that the most prominent locations in the search results webpage are occupied by ads that are relevant to the search results and have the highest bids. *Id.* at ¶¶ [0048] and [0049]. As such, Meisel fails to describe a determination to promote or demote a listing that does not take into account the performance of other listings as recited by amended independent claim 16. Meisel also fails to describe an expected performance level that includes settings that are tunable to accommodate different performance expectations in one or more search engine markets as recited by amended independent claim 16.

Independent Claim 26

Independent claim 26, as currently amended, recites computer-readable media having computer-executable instructions embodied thereon that, when executed perform a method for facilitating the optimal placement of search result listings in a search result user interface. The method includes, among other steps, capturing an actual CTR of a listing, normalizing the actual CTR of the listing based on its location, and promoting or demoting the listing based on a comparison between the normalized actual CTR and an expected CTR.

Independent claim 26 has been amended herein to further recite that capturing the actual CTR of the listing includes capturing a location of the listing and a context of the listing when it was clicked. Independent claim 26 has also been amended to further recite that normalizing is completed based on both the location of the listing and the context of the listing. Normalizing the actual CTR adjusts the actual CTR down when the location has a positive influence on the actual CTR, and adjusts the actual CTR up when the location has a negative influence on the actual CTR. Further, normalizing the actual CTR based on the context adjusts the actual CTR down when the context has a positive influence on the actual CTR, and adjusts the actual CTR up when the context has a negative influence on the actual CTR.

Applicants respectfully submit that Kamangar and Meisel fail to describe normalizing an actual CTR as recited by amended independent claim 26. Kamangar does not describe normalizing data. Meisel does describe normalization of data but, fails to describe normalizing an actual CTR based on the location or context of the listing as recited by amended independent claim 26. Meisel describes a comparative attractiveness factor that is calculated as a normalized probability, a normalized action rate for a listing (e.g. rate of actions received after a click-through), and a normalized probability for a listing based on an average intrinsic CTR

value. *Meisel* at ¶¶ [0079], [0081], and [0087]. Each of these calculations is concerned with the performance of an ad over time and in a variety of different rankings with respect to other ads. *Id.* The description provided by *Meisel* does not describe normalization of a value for an actual CTR for a listing being increased or decreased based on the effects of the location and context of the listing.

Independent Claim 32

Independent claim 32, as currently amended, recites computer-accessible media having computer-executable instructions embodied thereon that, when executed, cause a computing device to perform a method for displaying on a display device a search result Web page for a search term query, the search result Web page including at least two sections in which to display a search result listing, the at least two sections including a first section located in a more prominent area of the display device and the a second section located in a less prominent area of the display device. The method includes, among other steps, assigning an expected performance to a search result listing, measuring an actual performance of the search result listing, and determining that the search result listing should be promoted or demoted.

Independent claim 32 has been amended to further recite that the expected performance of a listing is a threshold performance level that is tuned to a particular market. Independent claim 32 has also been amended to more clearly recite that the determination that the listing should be moved to the more prominent or less prominent section is independent of an actual performance of any other listings. As such, amended independent claim 32 includes limitations similar to those described above with respect to independent claims 1 and 16. Accordingly, the remarks provided above with respect to independent claims 1 and 16 apply equally to independent claim 32. Applicants respectfully submit that Kamangar and *Meisel* fail

to describe tuning an expected performance to a particular market or a determination to promote/demote a listing that is not based on the performance of another listing as recited by amended independent claim 32.

Therefore, Applicants submit Kamangar and Meisel, either alone or in combination, fail to teach or suggest all of the limitations of amended independent claims 16, 26, and 32. Accordingly, Applicants respectfully submit that amended independent claims 16, 26, and 32 are not obvious over Kamangar in view of Meisel, and request withdrawal of the rejection under 35 U.S.C. § 103(a). Amended independent claims 16, 26, and 32 are believed to be in condition for allowance and such favorable action is hereby respectfully requested.

Claims 17-25, 29-31, 34-42, and 44-46 depend, either directly or indirectly, from amended independent claims 16, 26, and 32. Thus, Applicants respectfully submit that Kamangar and Meisel, either alone or in combination, fail to teach or suggest all of the limitations of dependent claims 17-25, 29-31, 34-42, and 44-46 for at least the above-cited reasons. Accordingly, Applicants respectfully submit that dependent claims 17-25, 29-31, 34-42, and 44-46 are not obvious over Kamangar in view of Meisel, and request withdrawal of the 35 U.S.C. § 103(a) rejection thereof. Claims 17-25, 29-31, 34-42, and 44-46 are believed to be in condition for allowance and such favorable action is hereby respectfully requested.

**CONCLUSION**

For at least the reasons stated above, claims 1-12, 14-26, 29-32, 34-42, and 44-46 are in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 816-474-6550 or areed@shb.com (such communication via email is herein expressly granted) – to resolve the same. It is believed that the required fees are submitted herewith, however, the Commissioner is hereby authorized to charge any additional amount required to Deposit Account No. 19-2112.

Respectfully submitted,

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